From: Mia, Marcia

Sent: Wednesday, May 10, 2017 04:39 PM

To: Chapman, Apple; Sorrell, Virginia

Subject: RE: What does the stay mean for folks who have already started monitoring

We can chat about this too. Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

60.5410a

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(j) To achieve initial compliance with the fugitive emission standards for each collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station, you must comply with paragraphs (j)(1) through (5) of this section.

(1) You must develop a fugitive emissions monitoring plan as required in §60.5397a(b)(c), and (d).

(2) You must conduct an initial monitoring survey as required in §60.5397a(f).

(3) You must maintain the records specified in §60.5420a(c)(15).

(4) You must repair each identified source of fugitive emissions for each affected facility as required in §60.5397a(h). [Note: the repair must be done within 30 days and resurveyed within 30 days of the repair]

(5) You must submit the initial annual report for each collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station compressor station as required in §60.5420a(b)(1) and (7).

Marcia B Mia

Office of Compliance/Air Branch

2227A WJCS

U.S. Environmental Protection Agency

202-564-7042

From: Chapman, Apple

Sent: Monday, May 08, 2017 4:13 PM

To: Mia, Marcia <Mia.Marcia@epa.gov>; Fried, Gregory <Fried.Gregory@epa.gov>

Subject: RE: What does the stay mean for folks who have already started monitoring

I think you answered the question.

Ms. Apple Chapman |Deputy Director, Air Enforcement Division | U.S. Environmental Protection Agency

1200 Pennsylvania Ave. NW, Washington DC, 20004 |202-564-5666 (office)|202-841-6076

(mobile)|

From: Mia, Marcia

Sent: Monday, May 08, 2017 2:50 PM

To: Chapman, Apple <Chapman.Apple@epa.gov>; Fried, Gregory <Fried.Gregory@epa.gov>

Subject: FW: What does the stay mean for folks who have already started monitoring

What should we say to these folks? Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP) So I just went back to his question:

A company has already conducted their initial monitoring survey (prior to the issuance of reconsideration letter). They have not yet completed repairs but plan to repair the leaks that were found. However, they are unsure if they would still need to complete repairs within 30 days (and conduct the follow up survey within 30 days of the repair) or if they can go with a more relaxed repair time given the stay. The concern is whether they would have to demonstrate initial compliance when the stay is lifted by conducting another "initial survey" since repairs would be outside of the 30 day window.

RESPONSE: Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Marcia B Mia

Office of Compliance/Air Branch

2227A WJCS

U.S. Environmental Protection Agency

202-564-7042

From: Marsh, Karen

Sent: Thursday, May 04, 2017 2:16 PM

To: Mia, Marcia <Mia.Marcia@epa.gov>

Cc: Branning, Amy <Branning.Amy@epa.gov>; Hambrick, Amy <Hambrick.Amy@epa.gov>; Thompson, Lisa <Thompson.Lisa@epa.gov>

Subject: What does the stay mean for folks who have already started monitoring

Marcia,

Roy called this afternoon with a specific question from one of his customers. He's outlined some information below but what it really boils down to is the following:

A company has already conducted their initial monitoring survey (prior to the issuance

of reconsideration letter). They have not yet completed repairs but plan to repair the leaks that were found. However, they are unsure if they would still need to complete repairs within 30 days (and conduct the follow up survey within 30 days of the repair) or if they can go with a more relaxed repair time given the stay. The concern is whether they would have to demonstrate initial compliance when the stay is lifted by conducting another "initial survey" since repairs would be outside of the 30 day window.

We'd like your input on how to respond to this type of question.

Thanks,

Karen

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Karen R. Marsh, PE

US EPA, OAQPS, Sectors Policies and Programs Division

Fuels and Incineration Group

109 TW Alexander Drive, Mail Code E143-05

Research Triangle Park, NC 27711

Direct: (919) 541-1065; email: marsh.karen@epa.gov

From: Roy [mailto:roy@enrud.com]

Sent: Thursday, May 04, 2017 1:53 PM

To: Marsh, Karen <Marsh.Karen@epa.gov>

Subject: RE: Salt water disposal facilities : Thank you for your time

Karen

Scenario:

I have an O&G facility that implemented the initial IR inspection on a well Production facility April 11th & 12th . Some leaks were found.

The leaks by rule (see citation below) should be repaired by May 11th or 12th (April has 30 days) depending which day found.

60.5397a(h)(1) Each identified source of fugitive emissions shall be repaired or replaced as soon as practicable, but no later than 30 calendar days after detection of the fugitive emissions.

On April 18th Pruitt signed a 90 stay of effectiveness of rule ….. and rule is under review and may go away.

Comments … I have many customers that have delayed the initial IR inspection for awhile .. till more clarity on what is going to happen.

This customer implemented an initial IR inspection.

FRAMING OF QUESTION: There is a stay on the rule. If this customer waits to see if rule goes away or not .. or does not initiate repair requirements of rule because the rule has a stay .. and the rule does NOT go away, are they exposing themselves to enforcement in this weird situation if a repair is completed in "say 45 days or longer"?

QUESTION: Does the stay on the 18th allow ….. (on the 30 day repair calendar counter)

….. a 6 or 7 calendar day count accumulation (days from April 11th or 12th till April 18th) then our counter clock stops because of stay and when the issue is resolved either the clock starts back up or the rule goes away.

What this really comes down to …because they have ordered parts and are going to fix things regardless because of air permit… just no 30 day clock in that.

"Should anyone have to pay for expedited shipping of equipment and resources to meet a clock that may not exist and is currently on a stay? This seems counter-productive."

Please forward to Enforcement or whomever is best suited to address the minutia of this question.

Roy

From: Marsh, Karen [mailto:Marsh.Karen@epa.gov]

Sent: Wednesday, April 19, 2017 8:32 AM

To: Roy

Subject: RE: Salt water disposal facilities : Thank you for your time

Roy,

I do not think you are being argumentative and wanted to let you know I had reviewed the information you sent over prior to actually receiving it from you. It is nice to know that we are finding the same information. When we look specifically at what the text of the rule says, the response I provided is general guidance. We've told a few others that it might be in their interest to reach out to their regions for formal applicability determinations. In these cases, they would need to present data to support the claim that potential fugitive emissions are negligible from these types of facilities.

Thanks,

Karen

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Karen R. Marsh, PE

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Research Triangle Park, NC 27711

Direct: (919) 541-1065; email: marsh.karen@epa.gov

From: Roy [mailto:roy@enrud.com]

Sent: Thursday, March 23, 2017 4:43 PM

To: Marsh, Karen <Marsh.Karen@epa.gov>

Subject: RE: Salt water disposal facilities : Thank you for your time

Thanks Karen,

And I do not mean to be argumentative …. I do not have a dog in this hunt ….. meaning my company gets paid to IR inspect facilities. But to inspect brine water (that only contains very small amounts of "very well stabilize skim oil, which is analogous to tar balls at the beach" ie. Not ever in vapor state at normal or elevated conditions)

with an IR camera is an illogical "WASTE" .

1) And I agree with your conservative interpretation of the language as written in the rule.

2) And, I have found no Background information to support my opinion.

Once again, Thanks for your time.

Roy

From: Marsh, Karen [mailto:Marsh.Karen@epa.gov]

Sent: Thursday, March 23, 2017 3:27 PM

To: Roy

Subject: RE: Salt water disposal facilities : Thank you for your time

Roy,

Thank you for the additional information. We are taking a look at this and our record and will let you know if anything previously provided changes.

Karen

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Karen R. Marsh, PE

US EPA, OAQPS, Sectors Policies and Programs Division

Fuels and Incineration Group

109 TW Alexander Drive, Mail Code E143-05

Research Triangle Park, NC 27711

Direct: (919) 541-1065; email: marsh.karen@epa.gov

From: Roy [mailto:roy@enrud.com]

Sent: Thursday, March 23, 2017 11:45 AM

To: Marsh, Karen <Marsh.Karen@epa.gov>; Hambrick, Amy <Hambrick.Amy@epa.gov>

Cc: Thompson, Lisa <Thompson.Lisa@epa.gov>

Subject: RE: Salt water disposal facilities : Thank you for your time

Hey Karen,

I will advise all my customers to include salt water disposal wells as part of OOOOa IR inspection program to be inspected before June 3rd 2017 until further notice.

My opinion: For what it is worth. …….. I do not agree that Salt water disposal wells are or should be included as part of OOOOa.

Industry accepted definitions (See below) : A disposal well is not an injection well nor 'hardly" ever referred to as an injection well unless you are "out of the industry as far as experience". So I agree that an that the well definition applies to a well in which fluids are injected.

But once again under this overly broad definition …. All commercial Salt Water Disposal

facilities would be regulated …. Which we sort a know they are not … below is a picture of a commercial disposal facility … only thing they sale is skim oil (NOT an Air Pollutant … it is stabilized). If you do not regulate these … what is the language or thought process where you would regulate a site that is noncommercial????

FROM Texas RRC website:

Injection and Disposal Wells

What is the difference between a disposal well and an injection well?

Disposal wells may be used to inject mineralized water produced with oil and gas into underground zones for the purpose of safely and efficiently disposing of the fluid. Typically, the underground interval is one that is not productive of oil and gas. In some cases, however, the disposal interval is a productive zone from which oil or natural gas has been produced or is currently produced. In either case, the disposal interval must be sealed above and below by unbroken, impermeable rock layers.

Injection wells inject fluids into a reservoir for the purpose of enhanced oil recovery from the reservoir. The vast majority of wells in Texas are injection wells. Operators use injection wells to increase or maintain pressure in an oil field that has been depleted by oil production and also to displace or sweep more oil toward producing wells. This type of secondary recovery is sometimes referred to as waterflooding.

Texas is the nation's number one oil and gas producer with more than 315,618 active oil and gas wells statewide according to oil and gas well proration schedules (as of June 30, 2015). Injection and disposal wells are also located throughout the state to improve oil and gas recovery and to safely dispose of the produced water and hydraulic fracturing flowback fluid from oil and gas wells. Texas has more than 54,700 permitted oil and gas injection and disposal wells with approximately 34,200 currently active as of July 2015. Of these 34,200 active injection and disposal wells, about 8,100 are wells that are used for disposal, the remainder (about 26,100) are injection wells.

SOURCE: Distribution of Wells Monitored by the Railroad Commission, updated August 29, 2014 and online Oil and Gas Data Query-Injection/ Disposal Permit Query.

See underlined above in 3rd paragraph: Injection and disposal wells are differentiated in the Oil and Gas industry!! So when regulated are they should be differentiated and ……. I believe the intent was to regulate injection wells for EOR, waterflood or gas lift as part of the definition of well site …. Not disposal wells for the safe mitigation of brine water (and other small amounts of operational remnants) … especially when they are already tracked and regulated.

What chemicals are found in the fluid injected into injection and disposal wells?

The overwhelming majority of injected fluid is oilfield brine, which is also sometimes referred to as produced water. Oilfield brine is the water, with varying levels of salinity that is found in the same geologic formations that produce oil and gas. This produced water comes up simultaneously with the production of oil and gas. However, small quantities of substances used in the drilling, completion and production operations of a well may be mixed in this waste stream. Some of these materials that may enter into the oilfield brine waste stream are minor amounts of drilling mud, fracture fluids and well treatment fluids. Also, because the produced water is associated with crude oil and natural gas, small amounts of residual hydrocarbons may also be found in the produced water.

More info below: http://glenrosecurrent.com/texas-railroad-commission-facts-about-disposal-wells/

Texas Railroad Commission: Facts about oil and gas disposal wells

What purpose do saltwater disposal wells serve?

Oil and gas reservoirs are found in porous rock formations that also usually contain significant amounts of saltwater. In Texas, the saltwater produced with oil and gas (sometimes referred to as produced water), as well as hydraulic fracturing flowback fluid (if a well undergoes hydraulic fracturing stimulation treatment), must be disposed of in a manner that will not cause or allow the potential for pollution of surface or subsurface waters.

There are three different categories of underground injection used to manage the disposal of oil and gas produced wastewater:

1. Oil and gas produced wastewater may be returned to the reservoir where it originated by injection for secondary or enhanced oil recovery. These injection wells are referred to as "injection wells" or wells involved in "secondary recovery/injection wells" (permit applications are filed on Form H-1/H-1A);

2. Oil and gas produced wastewater may be disposed of by injection into underground porous rock formations not productive of oil or gas that are isolated from useable quality groundwater and sealed above and below by unbroken and impermeable strata. Injection wells of this type are referred to as "disposal wells" or are wells involved in "disposal into a non-productive zone" (permit applications are filed on Form W-14); or

3. Oil and gas produced wastewater may be disposed of by injection back into the productive zone where it originated with the associated oil or natural gas that it was produced with. This type of waste management is referred to as "disposal" because it occurs without the added benefit of "secondary recovery" as in the first category, and is also referred to as "disposal into a productive zone" (these permit applications are also filed on Form H-1/H-1A).

The vast majority of wells in Texas are injection wells, not disposal wells. As of calendar year 2013, Texas has more than 50,000 permitted oil and gas injection and disposal wells with approximately 35,000 currently active as of calendar year 2013. Of these 35,000 active injection and disposal wells, about 7,500 are wells that are disposal wells and the remainder are injection wells.

Operators are required to follow the Railroad Commission's (RRC) disposal regulations administered by the agency's Technical Permitting Section-Underground Injection Control (UIC) Program. Underground Injection Control is a program that is federally delegated by the U.S. Environmental Protection Agency (EPA) to Texas, and it follows national guidelines under the federal Safe Drinking Water Act for surface and groundwater protection. EPA awarded the Railroad Commission "primary enforcement responsibility" over oil and gas injection and disposal wells on April 23, 1982.

What is the difference between a disposal well and an injection well?

Disposal wells may inject fluid into an underground interval that is not productive of oil and gas and sealed above and below by unbroken, impermeable strata or dispose produced water back into a productive zone where the oil or natural gas is produced.

Injection wells re-inject fluids into the same reservoir from which the fluids originated for secondary or enhanced oil recovery from depleted reservoirs. The vast majority of wells in Texas are injection wells, not disposal wells. Operators use secondary recovery techniques to maintain an oil field's pressure that gets depleted as oil is produced and also to displace or "sweep" more oil toward producing wells. Secondary recovery is sometimes known as waterflooding.

How many of these wells are in Texas?

Texas is the nation's number one oil and gas producer with more than 295,000 active oil and gas wells statewide. Injection and saltwater disposal wells are also located throughout the state to improve oil and gas recovery and to safely dispose of the produced water and hydraulic fracturing flowback fluid from oil and gas wells. Texas has more than 50,000 permitted oil and gas injection and disposal wells with approximately 35,000 currently active as of calendar year 2013. Of these 35,000 active injection and disposal wells, about 7,500 are wells that are used for disposal, the remainder are injection wells.*

From: Marsh, Karen [mailto:Marsh.Karen@epa.gov]

Sent: Thursday, March 23, 2017 9:20 AM

To: Hambrick, Amy; Roy

Cc: Thompson, Lisa

Subject: RE: Salt water disposal facilities

Roy,

Yes, salt water disposal wells are subject to OOOOa fugitive emissions monitoring. Well is defined at 60.5430a as "a hole drilled for the purpose of producing oil or natural gas, or a well into which fluids are injected." Further, the definition of a well site includes injection wells (see 60.5430a, "Well site means one or more surface sites that are constructed for the drilling and subsequent operation of any oil well, natural gas well, or injection well"). If you have any site specific information that we should consider, please feel free to send that as well and we can provide additional guidance. As a reminder, this is only for guidance purposes and does not constitute a formal determination of applicability.

Karen

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Karen R. Marsh, PE

US EPA, OAQPS, Sectors Policies and Programs Division

Fuels and Incineration Group

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Research Triangle Park, NC 27711

Direct: (919) 541-1065; email: marsh.karen@epa.gov

From: Hambrick, Amy

Sent: Thursday, March 23, 2017 10:04 AM

To: Roy <roy@enrud.com>

Cc: Marsh, Karen <Marsh.Karen@epa.gov>; Thompson, Lisa <Thompson.Lisa@epa.gov>

Subject: RE: Salt water disposal facilities

Roy, thanks for your vm. We will be in touch soon to discuss. Thanks.

Amy

Amy Hambrick

U.S. Environmental Protection Agency

(919)541-0964

From: Roy [mailto:roy@enrud.com]

Sent: Tuesday, March 14, 2017 5:48 PM

To: Hambrick, Amy <Hambrick.Amy@epa.gov>

Subject: Salt water disposal facilities

Any guidance on whether these are applicable to OOOOa Fugitive Emissions IR camera inspections

Roy